GOVERNMENT OF INDIA
OCEAN DEVELOPMENT
LOK SABHA

STARRED QUESTION NO:543
ANSWERED ON:04.05.2005
DESALINATION OF SEA-WATER
Reddy Shri Magunta Sreenivasulu

Will the Minister of OCEAN DEVELOPMENT be pleased to state:

(a) whether the Government has carried out any technology demonstration for desalination of sea water and fresh water into fresh potable water to overcome drinking water problems;

(b) if so, the details thereof; and

(c) the details of the ongoing schemes for desalination of sea water?

Answer

THE MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE (INDEPENDENT CHARGE) OF THE DEPARTMENT OF OCEAN DEVELOPMENT (KAPIL SIBAL)

(a): Yes, Sir.

(b) & (c): National Institute of Ocean Technology (NIOT), Chennai, an autonomous body of the Department, has developed two laboratory scale desalination plants each having a capacity of 500 and 5000 litres per day, based on Low Temperature Thermal Desalination System (LTTD). The LTTD is a process by which fresh water is produced by flashing warm surface sea water under low vacuum conditions and condensing the vapour using cold deep seawater. Currently, efforts are underway to establish a 1 lakh litre per day capacity plant at Kavaratti, Lakshadweep. It is expected to be completed shortly.

NIOT has also demonstrated LTTD technology for generating fresh water from sea water on a barge mounted desalination plant, 40 km off Tuticorin which has successfully produced 10 lakh litres in a 10 day period and the water quality is found to be excellent. Besides, NIOT is also in the process of designing a 50-lakh litres per day barge mounted desalination plant.